

**REMARKS**

Claims 1-18 are pending in the present application. Claims 1, 7, 12, and 17 are independent claims. Claims 1-18 currently stand rejected as unpatentable under 35 U.S.C. 103(a). New dependent claims 19 and 20 have been added.

To further distinguish the claimed invention over the cited prior art, Applicants have amended independent claims 1, 7, 12, and 17 to note that during the authentication process of the mobile station, the mobile station is placed in a short message service (SMS) only status. In other words, during the authentication process the mobile station can send and receive only SMS messages, it cannot send or receive data and/or voice messages. Applicants submit that this feature further patentably distinguishes the claimed invention from the cited references, taken either individually or in combination. In light of the amendment and the remarks presented below, Applicants respectfully traverse the rejection and request allowance of all claims of the present application.

**REJECTION UNDER 35 U.S.C. §103****Claims 1, 7, 12, and 17**

The Office Action rejected claims 1, 7, 12, and 17 under 35 U.S.C. §103 as being unpatentable over U.S. Patent Publication No. 2004/0116155 by to Aisenberg et al. (hereinafter "Aisenberg") in view of U.S. Patent Publication No. 2005/0215245 by Tian et al. (hereinafter "Tian"), and further in view of U.S. Patent No. 6,320,873 by Nevo et al. (hereinafter "Nevo").

Cited Prior Art Reference Tian (Pub. No. 2005/0215245) Non-Enabling

The present Patent Application Ser. No. 10/804,301 claims priority on, U.S. Provisional Patent Application Ser. No. 60/455,909 which was filed on March 18, 2003.

The cited Tian reference 2005/0215245 claims its earliest priority on U.S. Provisional Patent Application 60/395,256, filed on July 12, 2002. Provisional Application 60/395,256 includes a two paragraph specification and four pages of drawings. The specification provides no description of the drawings and does not enable the later-filed application. This provisional application is but a skeleton of what was eventually filed as the Tian reference.

A prior art reference must sufficiently describe the claimed invention to have placed the public in possession of it. (*Paperless Accounting, Inc. v. Bay Area Rapid Transit Sys.*, 231 USPQ 649 (Fed Cir. 1986)) Applicant submits that only provisional application 60/395,256 predates Applicant's filing date and that this provisional application fails to teach, suggest, or enable the claimed elements. For example, provisional application 60/395,256 fails to teach or enable a "general global gateway configured to support communication between a GSM network and an unmodified CDMA network to enable a mobile station (MS) subscribed in the GSM network to communicate using the CDMA network, wherein when the mobile station is a CDMA mobile station with a subscription in the GSM network *during registration of the mobile station*, the GGG acts as an authentication controller in the unmodified CDMA network, but authenticates the mobile station using the GSM authentication mechanism, and wherein the MS is placed in a short message service (SMS) only status during authentication", as recited in claim 1. Additionally, provisional application 60/395,256 also fails to teach or enable the detailed limitations recited in claims 2-17. Consequently, the cited prior art fails to anticipate the claimed limitations.

Claimed Elements are Not Taught or Suggested by the Prior Art

The Office has the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness. *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787 (Fed. Cir. 1984). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, the prior art references must teach or suggest all the claim limitations. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Third, there must be a reasonable expectation of success. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143 - § 2143.03 for decisions pertinent to each of these criteria.

As to independent claims 1, 7, 12, and 17, the Final Office Action states that Aisenberg teaches "a database 20 configured to store a number of times the mobile station has accessed the GGG." Aisenberg describes the operation of a mobile phone 50 and has nothing to do with a GGG (e.g., a hybrid network authentication controller) as claimed. For instance, Aisenberg refers to a storage module 20 (e.g., SIM) stored in a storage card 40 in a mobile device 50. (See paragraph [0044]). This is completely different than the claimed *database* which is stored in a GGG (e.g., hybrid network authentication controller) ("A general global gateway (GGG) comprising: a *database* ...). In discussing other prior art references, the Office Action has interpreted the GGG as a hybrid network authentication controller. Therefore, it is inappropriate and wrong to rely on Aisenberg which only teaches the functions of a mobile device [phone]. Consequently, Applicant submits that Aisenberg does not teach the claimed limitations and is inappropriate prior art.

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As to independent claims 1, 7, 12, and 17, the Final Office Action states that Tian, U.S. Patent Publication No. 2005/0215245, teaches "a gateway 304 that supports communication between a GSM network and an unmodified CDMA network so that a mobile station subscribed to the GSM network can communicate using the CDMA network." (See Final Office Action 1-14-2008, pages 2 and 3). However, in making such broad statement, the Final Office Action completely ignores the specific language of the claims. In particular, the claims recite that (A) "when the mobile station is a *CDMA mobile station* with a *subscription* in the *GSM network*, the GGG acts as an authentication controller in the unmodified CDMA network *during registration* of the mobile station but *authenticates the mobile station* using the *GSM authentication mechanism*" and (B) "the MS [mobile station] is placed in a *short message service (SMS) only status during authentication*." Applicant submits that this particular mode of operation and limitations are not taught by Tian or any of the other cited prior art references.

Tian teaches a network operable to service both a GSM compliant mobile device and a CDMA2000 compliant mobile device, as well as Radio Access Networks based on different technologies using a single core network (CN). However, before any communications can take place, a mobile device is typically authenticated by the network. While Tian suggests that the MSC 304 [GGG] may be connected to an authentication center (AuC) 312, Tian is silent as to how the GGG operates during authentication of a CDMA mobile device. (See Figure 3 and paragraph [0024]) In particular, Tian does not teach that the GGG *authenticates the [CDMA] mobile station using the GSM authentication mechanism*. Tian describes that the MSC 304 can establish calls for both GSM and CDMA mobile devices (see paragraph [0025]) but does not mention how such mobiles are authenticated.

Tian also fails to teach placing the mobile station in a SMS only status during authentication as in the claimed invention. In Tian, a channel is established between the mobile

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station and the hybrid switch. When information compatible with a first standard is received and it to be transmitted to a network with a second standard, the gateway or hybrid switch inserts the information into a message compatible with the second standard. (See Tian, Figure 5 and paragraphs [0030]-[0032]). The information in Tian is voice and/or data. However, "SMS only" means the mobile station sends and receives only SMS messages, not data and/or voice messages. (See paragraph [0073] of the present application) Thus, Tian fails to teach placing the mobile station in a SMS only status during authentication

*The Office Action further relies on Nevo as teaching a system and method for providing authentication of a mobile terminal in a hybrid network where when the mobile station is a CDMA mobile station, with a subscription in the GSM network, during registration or the mobile station a GGG acts as an authentication mechanism.*

A close reading of Nevo reveals that it operates differently than the claimed invention. While Nevo discloses a hybrid GSM/CDMA cellular communication system built around a public land mobile network (PLMN), communications are solely based on the *GSM communications standard*. A mobile station (MS) in Nevo is capable of communicating directly with both the GSM base station subsystem (BSS) and the CDMA BSS. To sustain the capability for direct communications, each MS comprises two interfaces, a GSM interface and a CDMA interface or a single interface that switches between the CDMA and GSM protocols (see Col. 6, lines 1-6 and 16-21). Nevo does not teach separate GSM and CDMA mobile stations supported each by a respective GSM or CDMA standard signaling and authentication protocols. While the mobile station communicates with the GSM BSS using a standard GSM-based (TDMA) protocol, and with the CDMA BSS using a standard CDMA-based (TIA/EIA) protocol, *the rest of the communications in the system are GSM-based* (Col. 4, lines 57-60 and Col. 5, lines 17-49). Specifically, both the CDMA BSS and GSM BSS are controlled by and

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communicate with a mobile switch center (MSC) through the GSM network in accordance with the GSM standard. Likewise, the MS communicates with a general packet service network GSM SGSN and with a gateway GPRC using the GSN network and the GPRS standard protocols. The only communication in Nevo supported by the CDMA network is the communications between the CDMA interface of the MS and the CDMA BSS (Col. 5, lines 17-29). Nevo fails to teach "*the GGG being configured to support communication between a GSM network and an unmodified CDMA network to enable a mobile station (MS) subscribed in the GSM network to communicate using the CDMA network.*" Moreover, while the MSC is responsible for the registration of the subscriber units, the function of subscriber's *authentication* is performed on another, upper level of communications between the MS and the SGSN (see Col. 6, lines 22-39). To support the counterpart interface's signaling standards, both mobile station interfaces are *modified* during the authentication (see Col. 6, lines 40-42). Therefore, Nevo also fails to provide any teaching or suggestion that "the GGG acts as an authentication controller in the *unmodified* CDMA network during registration of the mobile station but authenticates the mobile station using the GSM authentication mechanism."

Since Aisenberg, Tian and Nevo, in combination or individually, fail to teach or suggest the invention as claimed in independent claims 1, 7, 12, and 17, any combination of these references also fail to teach the elements of the above claims.

#### No Motivation to Combine Cited References

Applicants submit that one of the ordinary skill would have found no motivation to combine Aisenberg, Tian, and Nevo as the Examiner alleged in the Office Action.

"In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification." *In re Linter*, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). The teaching or suggestion to make the claimed combination must be found in the prior art, not in the Applicant's disclosure.

As stated above, Aisenberg teaches a single-network (GSM) mobile phone with a memory module that is enabled to share or transfer information accumulated in the memory to and from a mobile phone. In particular, Aisenberg has nothing to do with GGGs (hybrid network authentication controllers). Tian, on the other hand, discloses a network operable to service both a GSM compliant mobile device and a CDMA2000 compliant mobile device, as well as using Radio Access Networks based on different technologies with a single core network (CN). Nevo discloses a mobile station having two interfaces for direct communications with a GSM BSS and a CDMA BSS using predominately the standard GSM-based protocol. Both Tian and Nevo teach systems operable in at least two different networks. Using the single-network structure mobile phone of Aisenberg within the environment of either Tian or Nevo would defeat the purpose of each of the two references. These cited prior art references operate on different communication architectures which combination is structurally and/or operationally incompatible with each other. Applicants submit that one of ordinary skill would not be motivated by the teachings of Tian and Nevo to modify Aisenberg to develop the GGG configured to support communication between a GSM network and an unmodified CDMA network as claimed in independent claims 1, 7, 12, 17.

Should Examiner maintain the position that it would have been obvious to one of ordinary skill in the art to modify and combine these references, Applicants respectfully request

that a detailed explanation of how these structurally and operationally different communication architectures can be modified in view of their incompatible operation.

No Reasonable Expectation of Success

Even if the references were combined, albeit improperly in Applicants' opinion, as described above, Applicants submit that the combination of the references does not teach or suggest the GGG of independent claims 1, 7, 12, and 17.

Combining Aisenberg, Tian and Nevo does not involve a simple combination of features but would require a wholesale redesign or restructuring of the communication system taught by Aisenberg. Consequently, there is no reasonable expectation of success in combining these references.

Claim 2

As to dependent claim 2 the Office Action also cites Aisenberg as teaching the limitations therein. While Applicant disagrees with the Office Action's response to the arguments presented in the response of 10/4/07 that Aisenberg teaches the limitations recited in this claim, this argument need not be reached since this claim is in condition for allowance due to its dependence on independent claim 1.

Applicants respectfully submit that a prima facie of obviousness as to claims 1, 7, 12, and 17 has not been shown by the Examiner. Claims 2-6, 8-11, 13-16 and 18 are therefore patentable for at least the same reasons as given in the independent claims 1, 7, 12, and 17 and the dependent claim 2. For at least the foregoing reasons, Applicant respectfully requests a withdrawal of the rejection under 35 U.S.C. §103.



In view of the above, therefore, Applicant respectfully requests reconsideration and withdrawal of the rejection of, and/or objection and allowance of claims 1-18.

Applicant has reviewed the references made of record and asserts that the pending claims are patentable over the references made of record.

**CONCLUSION**

In light of the amendments contained herein, Applicant submits that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026, including the Request for Continuation Fee under 37 CFR 1.114. Applicant hereby requests a one 1 month Extension of Time by charged to Deposit Account No. 17-0026.

Respectfully submitted,

Dated May 14, 2008

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